# IAP15 Rec'd PCT/PTO 2 6 SEP 2006

PTO/SB/21 (07-06)
Approved for use through 09/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                             |  | Application Numb      | per                     | 10/553,305   |  |  |
|---|-----------------------------|--|-----------------------|-------------------------|--|--|--|
| TRANSMITTAL   |                             |  | Filing Date           |                         | October 14, 2005   |  |  |
| FOF   | RM                          |  | First Named Inve      | entor                   | Norihiro Kobayashi   |  |  |
| (to be used for all correspo  | ondence after initial       | filing)  | Art Unit              |                         | 1645   |  |  |
| ·<br>   |                             | _  | Examiner Name         |                         | Not Yet Assigned   |  |  |
| Total Number of Pages in Th   | nis Submission              |  | Attorney Docket N     | Number                  | 64312(46590)   |  |  |
|   | ENCLO                       | SURES (  | (Check all that       | t apply                 | )  |  |  |
| X Fee Transmittal Form  |                             | Drawing(s)                                       |                       |                         | After Allowance Communication to TC  |  |  |
| Fee Attached  |                             | Licensing-related Papers                         |                       |                         | Appeal Communication to Board of Appeals and Interferences   |  |  |
| X Amendment/Reply   |                             | Petition   |                       |                         | Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)   |  |  |
| After Final   |                             | Petition to Convert to a Provisional Application |                       |                         | Proprietary Information  |  |  |
| Affidavits/declaration  | n(s)                        | Combined De Attorney                             | eclaration and Pow    | rer of                  | Status Letter  |  |  |
| X Extension of Time Reque   | est 📗                       | Terminal Disclaimer                              |                       | [                       | X Other Enclosure(s) (please Identify below):  |  |  |
| Express Abandonment Re  | quest                       | Request for Refund                               |                       | -Ce                     | eturn Receipt Postcard<br>ertificate of Express Mailing (1 page)<br>equence Listing Diskette   |  |  |
| Information Disclosure Statement  |                             | CD, Number of CD(s)                              |                       | -Se<br>-Co<br>-Sta      | equence Listing Paper Copy (13 pages)<br>opy of Notification of Missing Requirements (2 pages)<br>tatement to Support Filing and Submission in |  |  |
| Certified Copy of Priority Document(s)  |                             |  |                       |                         | cordance with 37 C.F.R. 1.821-1.825 (1 page)<br>harge \$250.00 to deposit account 04-1105  |  |  |
| Reply to Missing Parts/<br>Incomplete Application   | R                           | Remarks  |                       |                         |  |  |  |
| X Response to Notific<br>Missing Requireme<br>Under 35 U.S.C. 37  | ents                        |  |                       |                         |  |  |  |
| Olider 33 0.0.0. 3.   | '                           |  |                       |                         |  |  |  |
|   | SIGNATURE                   | OF APPLIC/                                       | ANT, ATTORNE          | Y OR A                  |  |  |  |
| Firm Name EDWARDŞ   | ANGĘŁL PA                   |  | <u>-</u>              |                         |  |  |  |
| Signature   |                             |  |                       |                         |  |  |  |
| Printed name Mark D. Ru   | rinted name Mark D. Russett |  |                       |                         |  |  |  |
| Date September 26, 2006   |                             |  | Reg                   | g. No.                  | 41,281   |  |  |
|   |                             |  |                       | •                       |  |  |  |
|   | ===                         |  |                       |                         | · · · · · · · · · · · · · · · · · · ·  |  |  |
| I hereby certify that this paper (alor<br>Express Mail, Label No. EV 75626;<br>MS PCT Commissioner for Patent | 3165 US, on the dat         | ate shown below i                                | in an envelope addres | ed) is bein<br>ssed to: | ng deposited with the U.S. Postal Service as   |  |  |

Dated: September 26, 2006 Signature: (Mary M. Hutchinson) PTO/SB/17 (07-06)
Approved for use through 01/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

| Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.  |                   |                                |  |                                 |                             |                            |              |
|---|-------------------|--------------------------------|--|---------------------------------|-----------------------------|----------------------------|--------------|
| Effective on 12/08/2004.  |                   |                                | Complete if Known                      |                                 |                             |                            |              |
| Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).   |                   |                                |  |                                 | 10/553,305                  |                            |              |
| FEE TRANSMITTAL   |                   |                                | Filing Date October 14, 20             |                                 | 05                          |                            |              |
| For FY 2005   |                   |                                | First Named Inventor Norihiro Kobayasi |                                 |                             |                            |              |
|   |                   |                                | Examiner Nar                           | Examiner Name Not Yet Assigned  |                             |                            |              |
| Applicant claims small en   | tity status.      | See 37 CFR 1.27                | Art Unit                               |                                 | 1645                        |                            |              |
| TOTAL AMOUNT OF PAYME   | NT                | (\$) 250.00                    | Attorney Doci                          | Attomey Docket No. 64312(46590) |                             | ·                          |              |
| METHOD OF PAYMENT (   | check all         | that apply)                    |  |                                 |                             |                            |              |
| Check Credit Card   | ı                 | Money Order No                 | ne Oth                                 | er (please ider                 | ntify):                     |                            |              |
| X Deposit Account Deposit A   | Account Num       | ber: 04-1105 Deposit Ac        | count Name:                            | Edwards                         | Angell Palmer               | & Dodge L                  | .LP          |
| For the above-identifie   | d deposit         | account, the Director i        | s hereby author                        | rized to: (che                  | ck all that apply)          |                            |              |
| x Charge fee(s) inc   | dicated be        | elow                           | Cha                                    | arge fee(s) in                  | dicated below, ex           | cept for th                | e filing fee |
| Charge any addi   | tional fee(       | s) or underpayment of          | x Cre                                  | dit any overp                   | payments                    |                            | -            |
| fee(s) under 37   | CFR 1.16          | and 1.17                       |  |                                 |                             |                            |              |
| 1. BASIC FILING, SEARCH, A  | ND EYAI           | MINIATION EEES                 |  |                                 | <del></del>                 |                            |              |
| 1. DAGIC FILING, SEARCH, A  |                   |                                | ARCH FEES                              | FΧΔΜΙΙ                          | NATION FEES                 |                            |              |
|   |                   | Small Entity                   | Small Enti                             |                                 | Small Entity                |                            |              |
|   | Fee (\$)          | <u>Fee (\$)</u>                |  | <u>Fee (\$)</u>                 |                             | <u>Fees P</u>              | aid (\$)     |
| Utility   | 300               | 150 500                        |  | 200                             | 100 -                       |                            |              |
| Design  | 200               | 100 100                        | 50                                     | 130                             | 65                          |                            |              |
| Plant   | 200               | 100 300                        | 150                                    | 160                             | 80                          |                            |              |
| Reissue   | 300               | 150 500                        | 250                                    | 600                             | 300                         |                            |              |
| Provisional   | 200               | 100 0                          | 0                                      | 0                               | 0                           |                            |              |
| 2. EXCESS CLAIM FEES  |                   |                                |  |                                 |                             |                            | Small Entity |
| Fee Description   | <b>D</b> .        | `                              |  |                                 |                             | Fee (\$)                   | Fee (\$)     |
| Each claim over 20 (including   |                   | •                              |  |                                 |                             | 50                         | 25           |
| Each independent claim over 3<br>Multiple dependent claims  | o (includi        | ng Reissues)                   |  |                                 |                             | 200                        | 100          |
|   |                   | - 141 -                        | - · · · · · ·                          | _                               |                             | 360                        | 180          |
| Total Claims Extra Cla  | x                 | Fee (\$) Fee                   | Paid (\$)                              |                                 | lultiple Depende<br>ee (\$) | ent Claims<br>Fee Paid (\$ |              |
| HP = highest number of total claims   |                   |                                |  |                                 | <u></u>                     | ee Faid (\$                | _            |
| Indep. Claims Extra Cla   | ims_              | <del></del>                    | Paid (\$)                              |                                 |                             |                            |              |
| 3 =<br>HP = highest number of independen  | t claims pai      | =<br>d for, if greater than 3. |  |                                 | •                           |                            |              |
| 3. APPLICATION SIZE FEE   |                   |                                |  |                                 |                             |                            | _            |
| If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 |                   |                                |  |                                 |                             |                            |              |
| sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).  Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)  |                   |                                |  |                                 |                             |                            |              |
| 100 = /50 (round <b>up</b> to a whole number) x =   |                   |                                |  |                                 |                             |                            |              |
| 4. OTHER FEE(S)  Fees Paid (\$)   |                   |                                |  |                                 |                             |                            |              |
| Non-English Specification, \$130 fee (no small entity discount)  Other (e.g., late filing surcharge): 1617 Search fee, examination fee or oath or 130.00  |                   |                                |  |                                 |                             |                            |              |
| Other (e.g., late filing surcharge): 1617 Search fee, examination fee or oath or 130.00  1251 Extension for response within first month 120.00  |                   |                                |  |                                 |                             |                            |              |
| SUBMITTED BY  |                   |                                |  |                                 |                             |                            |              |
| Signature   | <del>), (),</del> | - <del>LIDIO</del>             | Registration No.                       | 41,281                          | Telephone                   |                            |              |
| Name (Print/Type) Mark D. Ru  | K I U             | )SUP (                         | (Attorney/Agent)                       | 71,201                          |                             | ontomber                   | 26 2006      |
| Walk D. Ru  | SSEII             | <del> </del>                   |  |                                 | Date S                      | eptember                   | 20, 200b     |
|   |                   |                                |  |                                 |                             |                            |              |

| ı | I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as |
|---|--|
| ı | Express Mail, Label No. EV 756263165 US, on the date shown below in an envelope addressed to:  |
| ı | MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.  |
| ı |  |

Dated: September 26, 2006

Signature: \_\_

\_ (Mary M. Hutchinson)

Application No. (if known): 10/553,305

Attorney Docket No.: 64312(46590)

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 756263165 US in an envelope addressed to:

> MS PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

September 26, 2006 Date

| $\mathcal{N}$                     |                           |  |
|-----------------------------------|---------------------------|--|
| Signation                         | ire                       |  |
| Mary M. Hut                       | chinson                   |  |
| Typed or printed name of pe       | erson signing Certificate |  |
|                                   | (617) 439-4444            |  |
| Registration Number if applicable | Tolophone Number          |  |

Registration Number, if applicable 10/02/2006 L\_ANDGRA 00000073 041105 10553305

Telephone Number

01 FC:1617

130.00 DA

Note:

Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Return Receipt Postcard Transmittal (1 page) Fee Transmittal (1 page)

Combined Declaration and Power of Attorney (4 pages)

Sequence Listing Diskette

Sequence Listing Paper Copy (13 pages)

Copy of Notification of Missing Requirements (2 pages)

Response to Notification of Missing Requirements (2 pages)

Second Preliminary Amendment (3 pages)

Statement to Support Filing and Submission in Accordance with 37 C.F.R. 1.821-1.825 (1 page)

Petition for 1-Month Extension of Time Under 37 CFR 1.136(a)(1 page)

Charge \$250.00 to deposit account 04-1105

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Label No. EV 756263165 US, on the date shown below in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: September 26, 2006 Signature:

34. N

Docket No.: 64312(46590)

(PATENT)

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

(Mary M. Hutchinson)

In re Patent Application of: Norihiro Kobayashi et al.

Application No.: 10/553,305

Filed: October 14, 2005

For: PROTEIN CAPABLE OF BINDING

PLASTICIZER

Confirmation No.: 2154

Art Unit: 1645

Examiner: Not Yet Assigned

### RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED ELECTED OFFICE

MS PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Responsive to the Notification of Missing Requirements dated 26 June 2006 (the response period being extended up to and including September 26, 2006, by the accompanying request for extension of time), Applicant herewith files the following documents:

- 1. Executed Combined Declaration and Power of Attorney;
- Sequence Listing Diskette;
- 3. Sequence Listing Paper Copy;
- 4. Statement to Support Filing and Submission in Accordance with 37 C.F.R. 1.821 - 1.825;
- Second Preliminary Amendment; and
- Copy of Notification of Missing Requirements (Form PCT/DO/EO/905).

Docket No.: 64312(46590)

The undersigned requests any extensions of time necessary for response. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 64312(46590).

Dated: September 26, 2006

Respectfully submitted,

Mark D. Russett

Registration No.: 41,281

**EDWARDS ANGELL PALMER & DODGE LLP** 

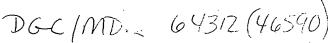
P.O. Box 55874

Boston, Massachusetts 02205

(617) 439-4444

Attorneys/Agents For Applicant

04/15/2003





### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO.

10/553,305 Norihiro Kobayashi 64312(46590)

INTERNATIONAL APPLICATION NO.

04/13/2004

PCT/JP04/05250

1.A. FILING DATE PRIORITY DATE

21874 EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205 JUN S U 2006

CONFIRMATION NO. 2154
371 FORMALITIES LETTER

\*OC000000019410536\*

Date Mailed: 06/26/2006

# NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 10/14/2005
- Copy of the International Search Report filed on 10/14/2005
- Preliminary Amendments filed on 10/14/2005
- Biochemical Sequence Diskette filed on 10/14/2005
- U.S. Basic National Fees filed on 10/14/2005
- Priority Documents filed on 10/14/2005
- Specification filed on 10/14/2005
- Claims filed on 10/14/2005
- Abstracts filed on 10/14/2005
- Drawings filed on 10/14/2005
- Paper Computer Listings filed on 10/14/2005

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of
  the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as
  indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a
  substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content
  of the sequence listing information recorded in computer readable form is identical to the written (on paper
  or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR
  1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

SEE OTHER SIDE ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

#### For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice **MUST** be returned with the response.

#### FREDERICK SMITH

Telephone: (703) 308-9140 EXT 210

#### PART 1 - ATTORNEY/APPLICANT COPY

| U.S. APPLICATION NUMBER NO. | INTERNATIONAL APPLICATION NO. | ATTY. DOCKET NO. |  |  |
|-----------------------------|-------------------------------|------------------|--|--|
| 10/553,305                  | PCT/JP04/05250                | 64312(46590)     |  |  |

FORM PCT/DO/EO/905 (371 Formalities Notice)